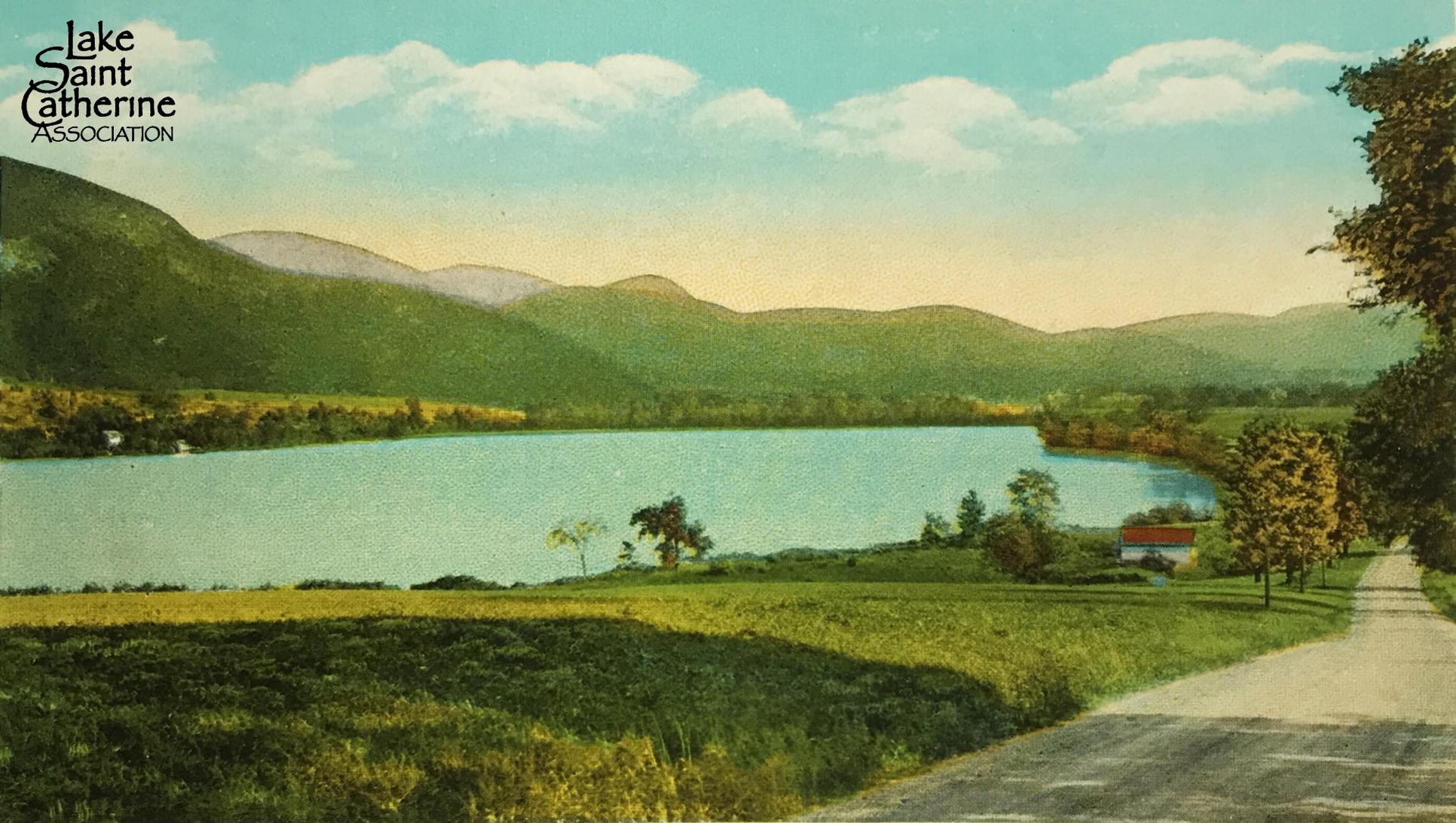


Lake
Saint
Catherine
ASSOCIATION





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House Committee on Environment and Energy - H.31

March 17th, 2023

About the LSCA

- **The Lake St. Catherine Association (LSCA) is a fully volunteer not-for-profit 501(c)(3) corporation, formed on August 31, 1953**
- **Stewards of the lake for 70 years**
- **Our mission: the preservation, protection and maintenance of Lake St. Catherine**
- **We manage, direct, and raise funds (memberships, donations, grants) for important lake management programs**

About the Lake St. Catherine

- **Located in Wells & Poultney**
- **Approximately 930 acres, max depth 68'**
- **3 unique basins, connected by channels**



Our Presentation

We'd like to briefly mention our lake programs and projects, including our Milfoil Control Program, and also respond to some of the comments and testimony you heard on Wednesday.

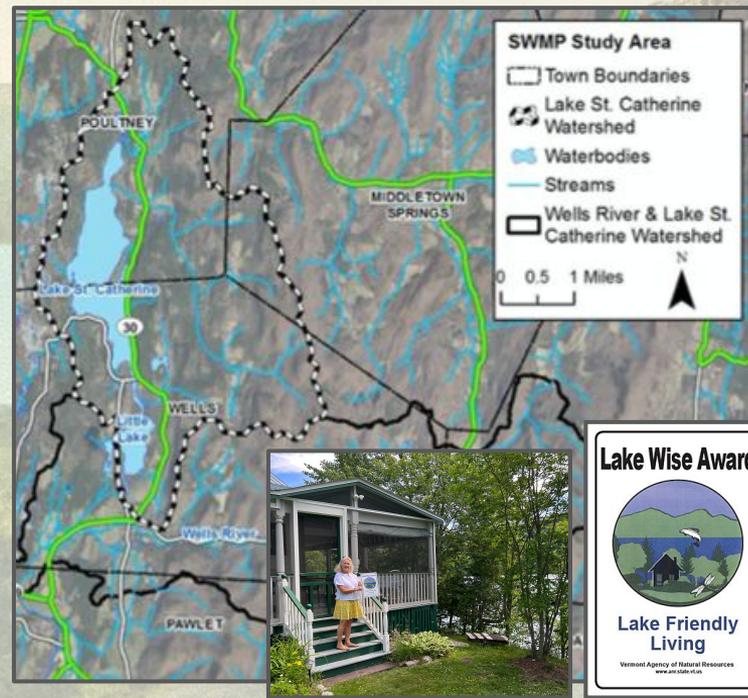


What We Do

- **Water quality improvement programs**
- **Events, organization of volunteers, education & outreach**
- **Lake safety**
- **Aquatic Invasive Species (AIS) prevention and control**
 - Greeter Program, Milfoil Control Program
- **Grant writing & fundraising to bring funds to Lake St. Catherine**
- **Working with the State, our towns, and environmental groups**

Water Quality: Programs & Projects

- **Lake Wise on LSC**
 - Working with property owners to mitigate runoff
 - 26 Lake Wise Award Winners over 4 years
- **LSC Stormwater Master Plan**
 - Working on larger watershed projects to mitigate runoff
 - 4 projects completed, 2 in the queue
 - 10 to 12 more projects will be designed this year
- **Vermont DEC Lay Monitoring**
 - 40 years of collecting water data about LSC
- **LSC Watershed Action Plan**
 - 3-year study of LSC watershed for a long-term plan



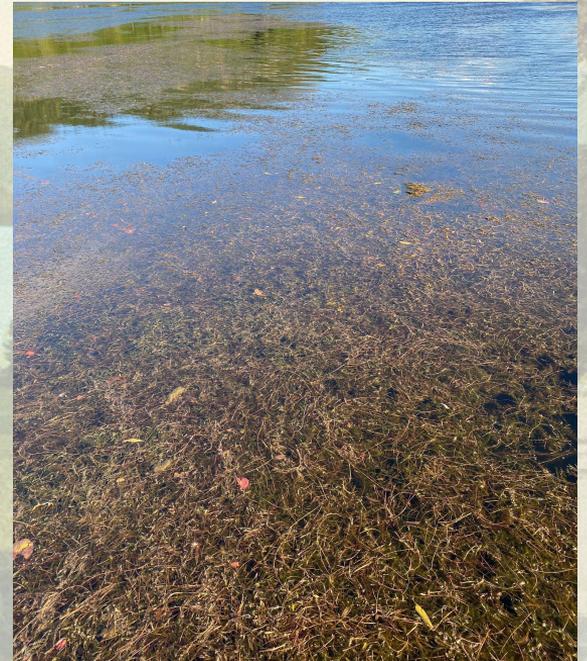
AIS Prevention: Greeter Program



- Inspecting boats entering and exiting LSC for aquatic invasive species

LSC's Battle With Milfoil

- **Milfoil was introduced into LSC in the early 1970s**
- **LSCA began mechanically harvesting in 1979**
- **Harvesting did not provide control, it contributed to spreading**
- **Hand-pulling, hydroraking, bottom barriers were also tried**
- **Nothing was stopping the spread, 49% of littoral zone**
- **A full lake treatment took place in 2004**
- **Since, spot treatments and DASH, as part of an integrated plan**
- **Photo: Little Lake before 2021 treatment**



Milfoil Control Program

1. 'Stop The Spread' education and outreach

Educating boaters and property owners on best practices to limit the spread of milfoil

2. Volunteer milfoil cleanup

Organizing volunteers to collect floating milfoil from the lake and deposit it at a designated drop off point

3. DASH - Diver Assisted Suction Harvesting

Hand-pulling milfoil by the roots from the lakebed & suctioning it up through a tube to the boat

4. Spot treatments with ProcellaCOR EC

An important tool in our toolbox

5. Water quality improvement programs

Although not directly related to our Milfoil Control Program, our work on Lake Wise, the Stormwater Master Plan, and the Watershed Action Plan all help to limit phosphorus and other nutrients from entering the lake which can contribute to excessive plant growth, while improving overall water quality

X. Potential 'Floating' hand-pulling pilot program in Little Lake



AIS Control: Milfoil Control Program



Stop The Spread - Milfoil Control Program

- Best Practices For Boaters And Property Owners -

Eurasian Watermilfoil (EWM, Milfoil) is an invasive, non-native plant that grows very quickly, at a rate much faster than our native aquatic plants, crowding them out.

Milfoil spreads very easily via fragmentation, and small pieces can seed new plants. Large patches of milfoil also impair recreational activities, and can constrict water flow.

The LSCA and LSCCF have created a 3-year plan designed to significantly reduce the amount of milfoil in Little Lake, now in year 2. This year will include applying a treatment of ProcellaCOR (LSCA), and employing the mechanical harvester for judicious navigation lane maintenance and floating milfoil collection and skimming (LSCCF). The very important final component of the plan is education and outreach to you, our boaters and property owners, to let you know what you can do to make this project (including milfoil control lake-wide) a success.

This handout contains steps that you can take to help stop the spread of milfoil in the lake.

On the opposite side of this page, you'll see the full 2022 Milfoil Control map for Lake St. Catherine, which includes the Diver Assisted Suction Harvesting (DASH) areas.

How You Can Help To Make These Efforts A Success

1. As a general rule, get as much milfoil out of the lake as possible. Let it dry out on land and dispose of it as you would yard waste.
2. Don't drive through milfoil patches with your boat which will create fragments.
3. If you have milfoil on your prop, don't just reverse and drive away, please remove it from the lake.
4. If you have milfoil growing in your dock or swimming area, pull it out by the roots and remove it from the lake.
5. If you see milfoil floating anywhere in the lake, near your dock, or along your shoreline, remove it from the lake.
6. Obey boating regulations by travelling at no-wake, 5 MPH speeds within 200' of the shoreline.

Keep in mind that native aquatic plants are VERY important and necessary to sustain a healthy lake ecology. Please focus on removing milfoil plants only.



Eurasian Watermilfoil



Results

- **Lowest percentage of milfoil cover and frequency of occurrence since the mid-2000s**
- **Many of our native plants like Water stargrass, Tape grass, Thin-leaf pondweed, Illinois pondweed, Common waterweed, and Robbins' pondweed have all increased in frequency of occurrence - which is exactly what we want!**
- **Little Lake treatment was highly successful, folks can use their boats again**
- **Based on the fall 2022 aquatic plant survey, our DASH team believes they can cover all areas of concern, and pending confirmation during our spring survey, we will not be performing a spot treatment with ProcellaCOR this year.**
- **Please check out the Milfoil Control Program page on our website: <https://lakestcatherine.org/milfoil-control-program> for much more information, including underwater video of a spot treatment area, and our DASH team working**

In Conclusion

The LSCA has been battling Eurasian watermilfoil since the late 1970s. While it's certainly true that we may never eradicate it from LSC, that does not mean that our Milfoil Control Program has not been successful. Our goal is milfoil control, and because of the hard work of our association, our lake community, and our DASH crew, we are achieving that goal, and our program has been very successful.

On Wednesday, you heard that with herbicides "you need to add more and more so you are on a treadmill", that "EWM will never be suitably controlled", and that milfoil control is "futile". As you have learned from Pat Suozzi from Lake Iroquois, and our experience at Lake St. Catherine, these comments are simply not true.

As part of our integrated plan, spot treatments with ProcellaCOR have been safe, and highly effective to help control milfoil, which allows our native plants to grow without being suppressed by dense beds of milfoil.

H.31 would remove a critical tool for lakes working to control milfoil, and due to the rapid spread of EWM, could potentially erase years of investment in control efforts that lakes may not be able to recover from.

All Vermonters own our lakes and ponds, and lake associations and their lake communities are on the front line working as volunteers for everyone who loves their lake to improve water quality, and to prevent and control aquatic invasive species. But, we need your support to be able to continue this work to preserve, protect and maintain these natural resources.

We ask that you vote no on H.31, and work to increase the dwindling funding for AIS prevention and control - please consider hearings on H.51. Thank you for your time.

Responding To Testimony

You heard this quote multiple times on Wednesday:

"...The Lake St. Catherine case has been nothing short of a disaster for warmwater fish populations...."

This is from an individual fish biologist from Fish & Wildlife. It was part of an email exchange between the DEC and numerous Vermont agencies that the DEC was seeking input from based on the Lake Bomoseen Association permit application.

What you were not told when this quote was read, was that the DEC took this claim very seriously, leading to the following reply later that day:

"I take your comments on the St. Catherine warmwater fish populations quite seriously as that is not a casual statement. Do you have data that supports this? If so, that needs to be incorporated into the overall discussion. Is this observation in St. Catherine only or is it seen in the other lakes with EWM control?"

There was no response from the biologist to this direct questioning from the DEC.

You also heard from Oliver that the DEC and Fish & Wildlife leadership do not agree with this statement.

Responding To Testimony

To help to combat misinformation being posted online, and in newspaper commentaries, and to provide fact-based information on ProcellaCOR and the herbicide permitting process, the DEC's released a whitepaper: "[Permitting Aquatic Herbicide Projects in Vermont](#)" in October 2022. It included a question and answer related to this topic:

Question 15: What is the impact of Eurasian watermilfoil management on the fishery in Lake St. Catherine?

Answer 15: Overall, Vermont FWD fisheries biologists have stated in writing that the fishery in Lake St. Catherine has not been damaged because of Eurasian watermilfoil management, but it has changed. Eurasian watermilfoil management in Lake St. Catherine has occurred over the past twenty years and has been accompanied by a shift from largemouth bass to smallmouth bass in the lake, according to a Vermont Fish and Wildlife Bass Inventory and Management Report – District 2 covering the period from July 1, 2020 to June 30, 2021. Vermont Fish and Wildlife fisheries biologists have stated that over 20 years of sampling data indicate that smallmouth bass populations have increased while largemouth bass have declined. In most lakes, when these shifts in species occur, it is related to availability of suitable habitat, with largemouth bass requiring more complex vegetated habitats than smallmouth bass. It is therefore reasonable to conclude that Eurasian watermilfoil management is at least partially responsible for this shift, although there may be other factors at play as well. **Also, it should be noted that the dataset used in the aforementioned FWD report does not include information about bass populations before 1988. Therefore, it is not known if largemouth bass populations today are any different to those in the lake before the milfoil infestations began in the early 1970s.**

Responding To Testimony

You also heard multiple times on Wednesday, that "Over a nine year period the DEC allowed over 90,000 pounds of chemicals [Renovate OTF] to be dumped into Lake St. Catherine."

What you were not told was that this previously used herbicide is in flake / pellet form (OTF = On Target Flakes), and 90% of the weight of the pellet is the inert carrier, to sink the pellet to root of the milfoil.

You also heard on Wednesday that with herbicides "you need to add more and more so you are on a treadmill", that "EWM will never be suitably controlled", and that milfoil control is "futile".

As you have learned from Pat Suozzi from Lake Iroquois, and our experience at Lake St. Catherine, these comments are just not true.

What is needed is more funding for AIS prevention and control. Our volunteer lake association, and our volunteers around the lake who love LSC are happy to do the work of water quality projects, and AIS prevention and control, but we need proper funding. Please consider having hearings on H.51.

Responding To Questions

There was a question about aeration and milfoil control. Aeration was tried on the Little Lake, and it had no impact on the milfoil. In fact, milfoil increased to its highest level ever in frequency of occurrence and percent of cover during the time aeration was running. The milfoil surrounding the aerators was healthy, and was actually able to grow longer because of the force of the aeration pushing the milfoil along the surface of the water.



Responding To Questions

There was a question about birds & wildlife on Wednesday. LSC has at least one nesting pair of eagles producing offspring, and we've never had so many loons visiting our lake. On any given day, you could also see herons, ospreys, multiple species of ducks, numerous species of smaller birds, muskrats, foxes, turtles, the list goes on and on...



Lake Saint Catherine ASSOCIATION



Thank you.

For more information, please visit our website: lakestcatherine.org

Questions? Please email me at jerremy.jones@lakestcatherine.org